

Amendment Under 37 C.F.R. § 1.111
Serial No. 10/067,294
Docket No: Q68446

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A heat developing apparatus in which a heat developing sheet on which a latent image is formed by the exposure, and is heated to the developing temperature through a preliminary heating ~~means~~section before the sheet is developed by a developing section, characterized in that:

the preliminary heating ~~means~~section has a plurality of rotating body pairs for nipping the heat developing sheet and for heating-conveying it to the developing temperature; and

the rotating body pairs are arranged so that the conveying direction of the heat developing sheet is changed by at least one pair of rotating body pair in the plurality of rotating body pairs.

2. (currently amended) A heat developing apparatus in which a heat developing sheet on which a latent image is formed by the exposure and is heated to the developing temperature through a preliminary heating ~~means~~section before the sheet is developed by a developing section, characterized in that:

the preliminary heating ~~means~~section has a plurality of rotating body pairs for nipping the heat developing sheet and for heating-conveying it to the developing temperature;

Amendment Under 37 C.F.R. § 1.111
Serial No. 10/067,294
Docket No: Q68446

the rotating body pairs are arranged so that the conveying direction of the heat developing sheet is changed by at least one pair of rotating body pair in the plurality of rotating body pairs;
and

after the heat developing sheet is brought into contact with ~~the~~one rotating body of one of
the rotating pairs the from the tangential line direction of a point on an outer periphery of the one
rotating body ~~constituting the rotating body pairs~~, the heat developing sheet is nipped.

3. (currently amended) A heat developing apparatus according to Claims 1 or 2, wherein
~~respective changes of the conveying direction of the heat developing sheet at the plurality~~
~~of rotating body pairs are~~ is changed in the same rotating direction ~~around the axial center of at~~
nip points of each of the ~~one rotating body which is respectively arranged in the same manner in~~
~~the respective~~ rotating body pairs.

4. (currently amended) A heat developing apparatus according to Claims 1 or 2, wherein
each of the plurality of rotating body pairs are structured by two rollers, and at least one
roller of the two rollers is a heating roller in which the heating means is provided; and
arrangement, interval and temperature of the heating rollers are set so as to have ~~the~~a
temperature difference by which the heat developing processing quality deterioration due to the
heat deformation of the heat developing sheet is not generated.

5. (original) A heat developing apparatus according to Claim 4, wherein

Amendment Under 37 C.F.R. § 1.111
Serial No. 10/067,294
Docket No: Q68446

the heating roller comprises a thick-wall metallic pipe,
heat source portion arranged on the axis center of the metallic pipe, and
a plurality of members whose heat conductivity is greater than the metallic pipe, are
buried at an equal interval in the peripheral direction of the wall thickness portion of the metallic
pipe.

6. (original) A heat developing apparatus according to claims 1 or 2, wherein
the rotating body surface material of the plurality of rotating body pairs which is brought
into contact with the surface on which a material forming a latent image of the heat developing
sheet is coated, is formed of silicon rubber, and
the heat developing sheet is deformed and conveyed in the same rotation direction as the
rotation body around the axis center of the rotating body structuring the surface by the silicon
rubber.

7. (original) A heat developing apparatus according to Claims 1 or 2, wherein
the rotating body pair nips the heat developing sheet by the self weight load of the
rotating body, and the rotating body arranged above the rotating body pair can be moved in the
surface direction in which the axis centers of the rotating body pairs are connected.

Amendment Under 37 C.F.R. § 1.111
Serial No. 10/067,294
Docket No: Q68446

Please add the following new claim:

8. (new) The heat developing apparatus of claim 3, wherein a degree of change of the conveying direction increases between a first and a second of the rotating body pairs and between the second and a third of the rotating body pairs.

Amendment Under 37 C.F.R. § 1.111
Serial No. 10/067,294
Docket No: Q68446

AMENDMENTS TO THE DRAWINGS

Fig. 4 has been amended to indicate the heat developing apparatus 1.

Attachment: Replacement Sheet